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EXAMINER

HUTTON JR, WILLIAM D

ART UNIT

PAPER NUMBER

2176

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/813,112	Applicant(s) ERICSON ET AL.	
	Examiner Doug Hutton	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-26 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13, 15-26 and 29-36 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20051018</u> . | 6) <input type="checkbox"/> Other: _____  |

***Applicant's Response***

In Applicant's Response dated 18 October 2005, Applicant amended Claims 1, 2, 15-17, 19, 22, 24 and 25, added new Claims 31-36, cancelled Claims 14, 27 and 28, and argued against all objections and rejections previously set forth in the Office Action dated 18 July 2005.

The rejection for Claim 15 under 35 U.S.C. 101 previously set forth is withdrawn.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-12, 15, 16, 22 and 23 remain rejected under 35 U.S.C. 102(b) as being anticipated by Lazzouni et al., U.S. Patent No. 5,652,412.

***Claim 1:***

Lazzouni discloses *a method of editing a document* (see Column 1, Lines 6-8; see Column 2, Lines 28-31 – Lazzouni discloses this limitation in that the information recording system allows a user to edit a document by recording written information on encoded paper and recording the written information in computer memory), *the method comprising:*

- *transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern* (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33 – Lazzouni discloses this limitation in that the information recording system includes paper encoded with pixels. The encoded paper is used by sales/mobile personnel to record “business transactions” in “sales books” and can be “made as a **form**” (emphasis added), as indicated in Column 4, Lines 43-50. Also, other forms can be used with the system, as indicated in Column 14, Lines 16-33.), *the position-coding pattern comprising symbols associated with grid points of a grid* (see Figures 12 and 13; see Column 6, Lines 40-44 – Lazzouni discloses this limitation in that the information recording system comprises the pixels, which contain encoded position information in the form of coordinates of an X-Y grid.) *and coding a plurality of positions of the surface* (see Figure 12; see Column 6, Lines 61-63 – Lazzouni discloses this limitation in that the information recording system comprises the pixels, which define a plurality of coordinate positions.), *each position being coded by a plurality of the symbols* (see Figures 12 and 13; see Column 11, Line 5 through Column 14, Line 15 – Lazzouni discloses this limitation in that the information recording system uses a plurality of pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user writes on the pixel paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user.), *wherein each symbol contributes to the coding of more than one of the*

*plurality of positions* (see Figures 12 and 13; see Column 11, Line 5 through Column 14, Line 15 – Lazzouni discloses this limitation in that the information recording system uses a plurality of pixels to determine the coordinates of the positions of the pen as it is moved over the pixel paper by the user. Thus, each pixel is used to code multiple positions of the pen.);

- *receiving editing information from a reading device adapted to read position information from the surface* (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45 – Lazzouni discloses this limitation in that the information recording system includes a pen and a recording apparatus. The pen allows the user to write on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent to the recording apparatus.);
- *interpreting the editing information* (see Figure 7; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 8, Line 65 through Column 9, Line 13 – Lazzouni discloses this limitation in that the information recording system includes the pen and the recording apparatus, wherein the recording apparatus includes components (see Figure 7) that "decode," "synthesize" and "compress" the data received from the pen, as indicated in

Column 8, Line 65 through Column 9, Line 13. The data is then stored in a microprocessor.); and

- *changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document* (see Column 9, Line 25-27; see Column 14, Lines 22-33 – Lazzouni discloses this limitation in that the information recording system provides both a hardcopy and a digital copy of the form and the user's handwriting, as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27.).

*Claim 6:*

Lazzouni discloses *the method according to Claim 1, wherein the editing information includes position information related to a position of the reading device on the surface* (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45 – Lazzouni discloses this limitation in that the pen allows the user to write on the encoded paper. As the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent to the recording apparatus.), *and wherein the interpretation of the editing information includes interpretation of the position information* (see Figure 7; see Column 2, Line 60 through

Column 3, Line 8; see Column 4, Lines 15-42; see Column 8, Line 65 through Column 9, Line 13 – Lazzouni discloses this limitation in that the recording apparatus includes components (see Figure 7) that “decode,” “synthesize” and “compress” the data received from the pen, as indicated in Column 8, Line 65 through Column 9, Line 13. The data is then stored in a microprocessor.).

*Claim 7:*

Lazzouni discloses *the method according to Claim 6, wherein the position information is in the form of sequences of coordinates forming manually generated curves corresponding in form to drawn curves on the printed document* (As indicated in the above rejections for Claims 1 and 6, and in the subsequent rejection for Claim 2, the pen and the recording apparatus detect and record the pen locations as the user edits the document. As the user edits the document, the user forms “manually generated curves” in that the user’s handwriting includes curved lines. The “sequences of coordinates” of the user’s handwriting are detected and recorded by the pen and the recording apparatus as the user edits the document.).

*Claim 8:*

Lazzouni discloses *the method according to Claim 1, further comprising displaying the document information of the updated document to a user* (see Column 9, Line 25-27; see Column 14, Lines 22-33 – Lazzouni discloses this limitation in that the information recording system provides both a hardcopy and a digital copy of the form

and the user's handwriting, as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27.).

*Claim 9:*

Lazzouni discloses *the method according to Claim 1, wherein the step of changing the document information includes adding editing information in the form of handwritten annotations to the document* (As indicated in the above rejection for Claim 1, and in the subsequent rejection for Claim 2, the information recording system allows the user to make handwritten annotations to the document).

*Claim 10:*

Lazzouni discloses *the method according to Claim 9, further comprising associating, based on position information included in the editing information, each of the handwritten annotations with a respective portion of the document information* (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45; see Column 9, Line 25-27; see Column 14, Lines 22-33 – Lazzouni discloses this limitation in that the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels as the user writes on the encoded paper. Thereafter, the information recording system provides both a hardcopy and a digital copy of the form and the user's handwritten



annotations, as indicated in Column 14, Lines 22-33. Thus, the user's annotations are "associated with a respective portion of the document information.").

*Claim 11:*

Lazzouni discloses *the method according to Claim 1, wherein changing the document information includes reformatting one or more parts of the document information* (see Column 9, Line 25-27; see Column 14, Lines 22-33 – Lazzouni discloses this limitation in that the information recording system incorporates the user's handwriting into the form and provides both a hardcopy and a digital copy of the form and the user's handwriting, as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27.).

*Claim 12:*

Lazzouni discloses *the method according to Claim 11, wherein said reformatting is chosen from the group of:*

- *adding text or graphics to said document information* (see Column 9, Line 25-27; see Column 14, Lines 22-33 – Lazzouni discloses this limitation in that the information recording system incorporates the user's handwriting into the form and provides both a hardcopy and a digital copy of the form and the user's handwriting, as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27.); *removing*

*text or graphics from said document information; or repositioning text or graphics included in said document information.*

*Claim 15:*

Claim 15 merely recites computer software that performs the method of Claim 1. The system disclosed in Lazzouni operates via software on a computer. Accordingly, Lazzouni discloses every limitation of Claim 15, as specified in the above rejection for Claim 1.

*Claim 16:*

Lazzouni discloses *a system for document editing* (see Column 1, Lines 6-8; see Column 2, Lines 28-31 – Lazzouni discloses this limitation in that the information recording system allows a user to edit a document by recording written information on encoded paper and recording the written information in computer memory), *the system comprising:*

- *storage means for storing a document* (see Column 1, Line 11 through Column 2, Line 17; see Column 9, Lines 14-38 – Lazzouni discloses this limitation in that it discloses many prior art devices that are used to edit documents stored in a “storage means.” Additionally, the information recording system comprises a host computer that can store all documents manipulated within the system. Finally, the recording apparatus comprises a storage means for storing the user’s handwritten edits to the form.);

- *means for transferring information from the document to a printing device capable of printing the information on a surface provided with a position-coding pattern, the position-coding pattern comprising symbols associated with grid points of a grid and coding a plurality of positions of the surface, each position being coded by a plurality of the symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation);*
- *means for receiving editing information from a reading device adapted to read position information from a position-coded surface (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation);*
- *means for interpreting the editing information (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation); and*
- *means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation).*

*Claim 22:*

Lazzouni discloses a *method of editing a document containing information* (see Column 1, Lines 6-8; see Column 2, Lines 28-31 – Lazzouni discloses this limitation in that the information recording system allows a user to edit a document by recording written information on encoded paper and recording the written information in computer

memory. As indicated in the above rejection for Claim 1, the edited documents include forms.), *the system comprising:*

- *storing the document information in memory* (see Column 1, Line 11 through Column 2, Line 17; see Column 9, Lines 14-38 – Lazzouni discloses this limitation in that it discloses many prior art devices that are used to edit documents stored in memory. Additionally, the information recording system comprises a host computer that can store all documents manipulated within the system. Finally, the recording apparatus comprises memory for storing the user's handwritten edits to the form.);
- *printing the document information on a surface, wherein the surface contains a readable code contained thereon in addition to the printed document information* (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33 – Lazzouni discloses this limitation in that the information recording system includes paper encoded with pixels. The encoded paper is used by sales/mobile personnel to record “business transactions” in “sales books” and can be “made as a ***form***” (emphasis added), as indicated in Column 4, Lines 43-50. Also, other forms can be used with the system, as indicated in Column 14, Lines 16-33.), *wherein the readable code comprises a grid and a plurality of symbols* (As indicated in the above rejection for Claim 1, Lazzouni discloses this limitation.), *the value of each symbol being determined by a displacement of a marking in relation to the grid* (**EXAMINER'S INTERPRETATION** – The examiner interprets this limitation as simply the x- and y-coordinates for the “*symbols*” on the paper

with respect to the “*grid*.” See **Specification** – Page 8, Paragraphs 0025-0027.

If the examiner is incorrect, then Applicant should explain in detail in the response to this Office Action how the limitation differs from the examiner's interpretation. **In Lazzouni:** As indicated in the above rejection for Claim 1, Lazzouni discloses this limitation.);

- *enabling an electronic pen to physically mark edit instructions on the surface and to electronically capture the edit instructions by reading the readable code proximate the marked edit instructions* (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45 – Lazzouni discloses this limitation in that the information recording system includes a pen and a recording apparatus. The pen allows the user to write on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The user's handwriting comprises “edit instructions” in that it modifies and revises the form.);
- *receiving through a processor associated with the memory the edit instructions captured by the electronic pen* (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45 – Lazzouni discloses this limitation in that the “pen location” data is sent to the recording apparatus.); *and*

- *altering the document information in memory to conform to the edit instructions* (see Column 9, Line 25-27; see Column 14, Lines 22-33 – Lazzouni discloses this limitation in that the information recording system provides both a hardcopy and a digital copy of the form and the user's handwriting, as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27.).

*Claim 23:*

Lazzouni discloses *the method of Claim 22, wherein the readable code is a position coding pattern* (see Column 4, Lines 8-14 – Lazzouni discloses this limitation in that the information recording system includes paper encoded with pixels).

Claims 32 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Lazzouni et al., U.S. Patent No. 5,652,412.

*Claim 32:*

Lazzouni discloses *the methods of Claims 1 and 16* (as indicated in the above rejections for Claims 1 and 16), *wherein each symbol codes a value which is determined by a displacement of a marking in relation to a grid point* (This limitation corresponds to the second element recited in Claim 22. Thus, Lazzouni discloses this limitation, as indicated in the above rejection for Claim 22.).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4 and 18 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni, in view of Henderson, U.S. Patent No. 5,897,648.

*Claim 3:*

As indicated in the above rejection, Lazzouni discloses every element of Claim 1.

Lazzouni fails to expressly disclose *receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device.*

Henderson teaches a *method of editing a document* (see Column 1, Lines 8-11 – Henderson teaches this limitation in that the electronic document editing system edits electronic documents), *the method comprising:*

- *receiving device identity information from a reading device, the identity information associating editing information with a user of the reading device* (see Figures 2-3; see Column 5, Lines 6-34; see Column 7, Lines 11-26 – Henderson teaches these limitations in that the electronic document editing system includes

multiple digitizer pens having different pen colors. The different pen colors are used to indicate edits made by different persons.), for the purpose of separately identifying the edits made by various individuals (see Column 7, Lines 24-26).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device,* for the purpose of separately identifying the edits made by various individuals, as taught in Henderson.

*Claim 4:*

As indicated in the above rejection, Lazzouni discloses every element of Claim 1.

Lazzouni fails to expressly disclose *editing information that is associated with a plurality of users, and wherein each user generates at least one editing command with a reading device.*



Henderson teaches *a method of editing a document* (see Column 1, Lines 8-11 – Henderson teaches this limitation in that the electronic document editing system edits electronic documents), *the method comprising:*

- *receiving editing information that is associated with a plurality of users, and wherein each user generates at least one editing command with a reading device* (see Figures 2-3; see Column 5, Lines 6-34; see Column 7, Lines 11-26 – Henderson teaches these limitations in that the electronic document editing system includes multiple editors working on a common document, each editor having a digitizer pen that has a different pen color. The different pen colors are used to indicate edits made by different persons. The edits made by the editors are “editing commands” in that the edits indicate changes to be made to the document. This teaching implies that each editor is capable of “generating at least one editing command.”),

for the purposes of allowing multiple editors to edit a common document and separately identifying the edits made by various individuals (see Column 7, Lines 24-26).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *editing information that is associated with a plurality of users, and wherein each user generates at least one editing command with a reading device,*

for the purposes of allowing multiple editors to edit a common document and separately identifying the edits made by various individuals, as taught in Henderson.

*Claim 18:*

Claim 18 merely recites a computer system that performs the method of Claim 3. Both Lazzouni and Henderson operate via a computer system. Accordingly, Lazzouni, in view of Henderson, discloses/teaches every limitation of Claim 18, as indicated in the above rejection for Claim 3.

Claim 13 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni, in view of Skinner, U.S. Patent No. 6,661,920.

*Claim 13:*

As indicated in the above rejection, Lazzouni discloses every element of Claim 12.

Lazzouni fails to expressly disclose that the "adding text" step includes *converting part of the editing information to machine-readable text.*

Skinner teaches a computer device that allows a user to write words and letters onto a digitizer pad using a pen. The device then *converts the user's handwriting into*

*machine-readable format*. Thus, Skinner teaches *converting handwriting into machine-readable text* for the purpose of allowing a user to input data into the computer device (see Column 1, Lines 54-65).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include *converting part of the editing information to machine-readable text into the “adding text” step*, for the purpose of allowing a user to input data into the computer device, as taught in Skinner.

Claims 2, 17, 24, 31, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni, in view of Dymetman et al., U.S. Patent No. 6,752,317.

*Claim 2:*

Lazzouni discloses a *method of editing a document* (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation), *the method comprising:*

- *initially registering said document in a pattern administration unit* (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21 – Lazzouni discloses this limitation in that the information recording system records different patterns of pixels for different documents. The patterns for the documents are unique in that each pattern is established by a coding algorithm that includes the following factors: number of different inks used, number of shades (or, intensity levels),

number of data lines in each pixel, width of each line; dimensions of each pixel, size of the paper, and the number of pixels in an x and y directions. The system stores these different patterns when they are created. Thus, the system includes a *"pattern administration unit"* that *"initially registers a document"* in that the system creates a pattern of pixels for a document and stores that pattern of pixels.);

- *the pattern administration unit assigning a unique subset of said position-coding pattern to the pages of said registered document* (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21 – Lazzouni discloses this limitation in that the information recording system records the pattern of pixels to be used for the document. Each page of the document will have the same pattern of pixels.);
- *transferring information indicative of the unique subset of the position-coding pattern, assigned by the pattern administration unit, to a printing device adapted to print the position-coding pattern on a surface* (see Figure 4; see Column 8, Lines 22-37 – Lazzouni discloses this limitation in that the information recording system comprises printing patterns of pixels on paper. Thus, the system *"transfers the position-coding pattern,"* which was *"assigned by the pattern administration unit,"* to a *"printing device"* that is *"adapted to print the position-coding pattern on a surface."*);
- *transferring document information to the printing device adapted to print the document information on the surface* (see Column 4, Lines 8-14; see Column 4,

Lines 43-50; see Column 14, Lines 16-33 – Lazzouni discloses this limitation in that the information recording system includes paper encoded with pixels. The encoded paper is used by sales/mobile personnel to record “business transactions” in “sales books” and can be “made as a ***form***” (emphasis added), as indicated in Column 4, Lines 43-50. Also, other forms can be used with the system, as indicated in Column 14, Lines 16-33. Thus, the system transfers “document information” to the “printing device” that is “adapted to print the document information on the surface.”);

- *receiving editing information from a reading device adapted to read position information from the position-coded surface* (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation);
- *interpreting the editing information* (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation); *and*
- *changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document* (see Column 9, Line 25-27; see Column 14, Lines 22-33 – Lazzouni discloses this limitation in that the information recording system provides both a hardcopy and a digital copy of the form and the user’s handwriting, as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27.).

Lazzouni fails to expressly disclose *a pattern administration unit that assigns a unique subset of said position-coding pattern to each page of said document* (emphasis added).

Dymetman teaches a method of manipulating a document (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10 – Dymetman teaches this limitation in that the document editing system identifies actions to be taken with corresponding documents), the method comprising:

- *a pattern administration unit that assigns a unique subset of a position-coding pattern to each page of said document* (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10 – Dymetman teaches this limitation in that the document editing system uses dataglyphs to identify particular pages and to specify a function to be performed regarding that particular page), for the purposes of specifically identifying a particular page and indicating a function to be performed regarding that particular page (see Column 3, Line 25 through Column 4, Line 10).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *a pattern administration unit that assigns a unique subset of said position-coding pattern to each page of said document,*

for the purpose of specifically identifying a particular page and indicating a function to be performed regarding that particular page, as taught in Dymetman.

*Claim 17:*

Lazzouni discloses a *system for document editing* (as indicated in the above rejection for Claim 16, Lazzouni discloses this limitation), *the system comprising:*

- *storage means for storing a document* (as indicated in the above rejection for Claim 16, Lazzouni discloses this limitation);
- *registration means which is arranged to initially register the document in a pattern administration unit comprising a database of a position-coding pattern, the pattern administration unit being arranged to assign a unique subset of the position-coding pattern to the pages of the registered document* (as indicated in the above rejection for Claim 2, Lazzouni discloses this limitation);
- *means for transferring information indicative of the unique subset of the position-coding pattern, assigned by the pattern administration unit, to a printing device adapted to print the position-coding pattern on a surface* (as indicated in the above rejection for Claim 2, Lazzouni discloses this limitation);
- *means for transferring information contained in the document to the printing device, the printing device being adapted to print the information on the surface* (as indicated in the above rejection for Claim 2, Lazzouni discloses this limitation);

- *means for receiving editing information from a reading device adapted to read position information from a position-coded surface (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation);*
- *means for interpreting the editing information (as indicated in the above rejection for Claim 1, Lazzouni discloses this limitation); and*
- *means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document (as indicated in the above rejection for Claim 2, Lazzouni discloses this limitation).*

Lazzouni fails to expressly disclose *a pattern administration unit that is arranged to assign a unique subset of said position-coding pattern **to each page** of the registered document (emphasis added).*

Dymetman teaches a method of manipulating a document (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10 – Dymetman teaches this limitation in that the document editing system identifies actions to be taken with corresponding documents), the method comprising:

- *a pattern administration unit that is arranged to assign a unique subset of a position-coding pattern to each page of said document (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10 – Dymetman teaches this limitation in that the document editing system uses dataglyphs to identify particular pages and to specify a function to be performed regarding that particular page),*



for the purpose of specifically identifying a particular page and indicating a function to be performed regarding that particular page (see Column 3, Line 25 through Column 4, Line 10).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *a pattern administration unit that is arranged to assign a unique subset of said position-coding pattern to each page of said document,*

for the purpose of specifically identifying a particular page and indicating a function to be performed regarding that particular page, as taught in Dymetman.

*Claim 24:*

Lazzouni, in view of Dymetman, discloses/teaches *the method of Claim 2 (see the above rejection for Claim 2), wherein the position-coding pattern comprises symbols associated with grid points of a grid and codes a plurality of positions on the surface, each position being coded by a plurality of the symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions (As indicated in the above rejection for Claim 1, Lazzouni discloses these limitations.).*

*Claim 31:*

Lazzouni, in view of Dymetman, discloses/teaches *the method of Claim 22* (see the above rejection for Claim 22), *wherein the readable code comprises symbols associated with grid points of a grid and codes a plurality of positions on the surface, wherein each position is coded by a plurality of the symbols, and wherein each symbol contributes to the coding of more than one of the plurality of positions* (This limitation corresponds to the first element recited in Claim 1. Thus, as indicated in the above rejection for Claim 1, Lazzouni discloses these limitations.).

*Claims 34 and 35:*

Lazzouni, in view of Dymetman, discloses/teaches *the method of Claim 2* (see the above rejection for Claim 2) *and the system of Claim 17* (see the above rejection for Claim 17), *wherein the position-coding pattern comprises a grid and a plurality of symbols, the value of each symbol being determined by a displacement of a marking in relation to the grid* (As indicated in the above rejection for Claim 22, Lazzouni discloses these limitations.).

Claims 19-21, 25, 26, 29 and 30 remain rejected under 35 U.S.C. 103(a) as being unpatentable Lazzouni, in view of Dymetman.

*Claim 19:*

Lazzouni, in view of Dymetman, discloses/teaches *the system of Claim 17* (see the above rejection for Claim 17), *wherein said storage means and said registration means are included in a computer device* (Lazzouni and Dymetman both operate via a computer system. Thus, the “*storage means*” and the “*registration means*” are included in a “*computer device.*”).

*Claim 20:*

Lazzouni discloses *a means for receiving editing information that is included in a pattern administration unit* (As indicated in the above rejection for Claim 2, the information recording system disclosed in Lazzouni includes a “*pattern administration unit.*” As indicated in the above rejection for Claim 1, the information recording system disclosed in Lazzouni includes a “*means for receiving editing information.*” Thus, Lazzouni discloses this limitation.).

*Claim 21:*

Lazzouni discloses *a means for receiving editing information that is included in a local processing unit* (As indicated in the above rejection for Claim 1, the information recording system disclosed in Lazzouni includes a pen and a recording apparatus. Thus, Lazzouni discloses this limitation.).

*Claim 25:*

As indicated in the above discussion, Lazzouni, in view of Dymetman, discloses/teaches every element of Claim 2. Lazzouni also discloses *a pattern administration unit that, in the registering, receives document data indicative of the document* (As indicated in the above rejection for Claim 1, Lazzouni discloses this limitation in that the information recording system allows the user to print a form on paper having a prerecorded pattern of pixels. The form is "*document data*" that is "*indicative of the document.*").

Lazzouni fails to expressly disclose *a pattern administration unit that, in the registering, receives document data indicative of the document **and of a number of document pages*** (emphasis added).

Dymetman teaches a method of manipulating a document (as indicated in the above rejection for Claim 14, Dymetman teaches this limitation), the method comprising:

- *a pattern administration unit that, in the registering, receives document data indicative of the document* (see Column 3, Line 25 through Column 4, Line 10 – Dymetman teaches this limitation in that the document editing system uses dataglyphs to identify documents) *and of a number of document pages* (see Column 2, Lines 18-28; see Column 3, Line 60 through Column 4, Line 3 – Dymetman teaches this limitation in that the document editing system includes

page identifiers. Also, the disclosure indicates that the prior art includes paper pixels that include page numbers.),  
for the purpose of specifically identifying particular documents and pages within a document (see Column 3, Line 25 through Column 4, Line 10).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *a pattern administration unit that, in the registering, receives document data indicative of the document **and of a number of document pages**,*  
for the purpose of specifically identifying particular documents and pages within a document, as taught in Dymetman.

*Claim 26:*

Lazzouni discloses *document data that includes the document* (As indicated in the above rejection for Claim 1, Lazzouni discloses this limitation in that the information recording system allows the user to print a form on paper having a prerecorded pattern of pixels. The form is “*document data*” that “*includes the document.*”).

*Claim 29:*

As indicated in the above discussion, Lazzouni, in view of Dymetman, discloses/teaches every element of Claim 17. Lazzouni also discloses *a registration means that is arranged to transfer document data indicative of the document to the pattern administration unit* (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21 – Lazzouni discloses these limitations in that the information recording system records a pattern of pixels for each document. The patterns for each document are unique in that each pattern is established by a coding algorithm that includes the following factors: number of different inks used, number of shades (or, intensity levels), number of data lines in each pixel, width of each line; dimensions of each pixel, size of the paper, and the number of pixels in an x and y directions. The system stores each of these different patterns when they are created. As indicated in the above rejection for Claim 1, Lazzouni discloses that the information recording system allows the user to print a form on paper having a prerecorded pattern of pixels. The form is “*document data*” that is “*indicative of the document.*”).

Lazzouni fails to expressly disclose *a registration means that is arranged to transfer document data indicative of the document and of a number of document pages to the pattern administration unit.*

Dymetman teaches a system for manipulating a document (as indicated in the above rejection for Claim 27, Dymetman discloses this limitation), the method comprising:

- *a registration means that is arranged to transfer document data indicative of the document* (see Column 3, Line 25 through Column 4, Line 10 – Dymetman teaches this limitation in that the document editing system uses dataglyphs to identify documents) *and of a number of document pages to the pattern administration unit* (see Column 2, Lines 18-28; see Column 3, Line 60 through Column 4, Line 3 – Dymetman teaches this limitation in that the document editing system includes page identifiers. Also, the disclosure indicates that the prior art includes paper pixels that include page numbers.),

for the purpose of specifically identifying particular documents and pages within a document (see Column 3, Line 25 through Column 4, Line 10).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system, disclosed in Lazzouni, to include:

- *a registration means that is arranged to transfer document data indicative of the document **and of a number of document pages** to the pattern administration unit,*

for the purpose of specifically identifying particular documents and pages within a document, as taught in Dymetman.

*Claim 30:*

Lazzouni discloses *document data that includes the document* (As indicated in the above rejection for Claim 1, Lazzouni discloses this limitation in that the information recording system allows the user to print a form on paper having a prerecorded pattern of pixels. The form is “*document data*” that “*includes the document.*”).

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable Lazzouni, in view of Dymetman, and further in view of Henderson.

*Claim 36:*

As indicated in the above discussion, Lazzouni, in view of Dymetman, discloses/teaches every element of Claim 2.

Lazzouni, in view of Dymetman, fails to expressly disclose/teach *a document that is a word-processing document*.

Henderson teaches *a method of editing a document* (Henderson teaches this limitation, as indicated in the above rejection for Claim 3), *wherein the document is a word-processing document* (see Column 6, Line 57 through Column 7, Line 10 – Henderson teaches this limitation in that the electronic document editing system allows a user to edit a word-processing document), for the purpose of allowing a user to



incorporate and display annotations of the document on an electronic version of the document (see Column 3, Lines 1-4).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, in view of Dymetman, to include:

- *a document that is a word-processing document,*

for the purpose of allowing a user to incorporate and display annotations of the document on an electronic version of the document, as taught in Henderson.

***Allowable Subject Matter***

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

***Claim 5:***

The closest prior art is Lazzouni et al., U.S. Patent No. 5,652,412, Henderson, U.S. Patent No. 5,897,648, and Merritt et al., U.S. Patent No. 6,041,335. The disclosure of Lazzouni and the teachings of Henderson are discussed at length in the above rejections.

Merritt teaches a collaborative system that allows multiple users to add annotations to a document. A timestamp is attached to each annotation so that the annotations can be ordered sequentially.

However, the system in Merritt does not include a surface having position-coding pattern. Rather, the system provides a window in a graphical user interface that allows a user to add annotations to a document. Thus, there is no motivation to combine the teachings of Merritt with the disclosure of Lazzouni and the teachings of Henderson.

Accordingly, the prior art fails to disclose or suggest edits generated by a plurality of users, wherein the edits are received on a surface having a position-coded surface, wherein the edits are in an ordered sequence identified by a timestamp associated with each editing command, as recited in Claim 5.

### ***Response to Arguments***

Applicant's arguments filed 18 October 2005 have been fully considered but they are not persuasive.

#### ***Arguments for Claim 1:***

Applicant argues that Lazzouni fails to disclose a "*position-coding pattern comprising symbols associated with grid points of a grid and coding a plurality of positions on the surface, each position being coded by a plurality of the symbols, wherein each symbol contributes to the coding of more than one of the plurality*

***of positions***” because each pixel disclosed in Lazzouni defines a unique coordinate position on the surface. See *Response* – Page 14, first through third full paragraphs.

The examiner disagrees.

As indicated in the above rejection for Claim 1, Lazzouni discloses a “*position-coding pattern comprising symbols associated with grid points of a grid*” in that the information recording system comprises the pixels, which contain encoded position information in the form of coordinates of an X-Y grid (see Figures 12 and 13; see Column 6, Lines 40-44). The “*position-coding pattern*” (i.e., the pixels) in Lazzouni also “*codes a plurality of positions of the surface*” in that the pixels define a plurality of coordinate positions (see Figure 12; see Column 6, Lines 61-63). The system disclosed in Lazzouni “codes” **every** position on the pixel paper, even those positions on the paper that do not include a pixel, in that the system uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. In other words, as the user writes on the pixel paper, the pen moves over and between a plurality of pixels, and the pixels are used to code the positions of the pen as it is moved by the user (see Figures 12 and 13; see Column 11, Line 5 through Column 14, Line 15). Thus, Lazzouni discloses “*each position being coded by a plurality of the symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions.*”

Accordingly, Lazzouni discloses this limitation.

*Arguments for Claim 22:*

Applicant argues that Lazzouni fails to disclose a “*readable code [that] comprises a grid and a plurality of symbols, the value of each being determined by a displacement of a marking in relation to the grid*” because each pixel disclosed in Lazzouni defines a unique coordinate position on the surface. Applicant’s argument for Claim 22 corresponds to the above argument for Claim 1. See *Response* – Page 15, second and third paragraphs.

The examiner disagrees.

As indicated in the above rejection for Claim 22, the examiner interprets the phrase “*the value of each symbol being determined by a displacement of a marking in relation to the grid*” to simply be the x- and y-coordinates for the “*symbols*” on the paper with respect to the “*grid*.” This interpretation corresponds with the description of the present invention found in the **Specification** at Page 8, Paragraphs 0025-0027. As indicated in the above rejection for Claim 1 and in the examiner’s “*Response to Arguments*” for Claim 1, Lazzouni discloses this limitation.

*Arguments for Claim 2:*

Applicant argues that Lazzouni fails to disclose “*initially registering said document in a pattern administration unit*” and “*pattern administration unit assigning a unique subset of said position-coding pattern to each page of said registered document*” because Lazzouni provides for offset printing wherein, prior to printing, two printing

plates are fabricated wherein one plate contains delimiter lines and the other plate contains the data lines.

Applicant argues further that Dymetman fails to cure the deficiencies of Lazzouni because Dymetman fails to teach “*initially registering said document in a pattern administration unit*” and then the “*pattern administration unit assigning a unique subset of said position-coding pattern to each page of said registered document.*”

Finally, Applicant argues that neither Lazzouni nor Dymetman teaches “*transferring information indicative of the unique subset of the position-coding pattern, assigned by the pattern administration unit, to a printing device adapted to print the position-coding pattern on a surface*” and “*transferring document information to the printing device adapted to print the document information on the surface*” because neither teach transferring the document information and the information indicative of a subset of the position-coding pattern to the same printing device. See *Response* – Page 16, second paragraph through Page 18, first full paragraph.

The examiner disagrees.

As indicated in the above rejection for Claim 2, Lazzouni discloses “*initially registering said document in a pattern administration unit*” in that the information recording system records different patterns of pixels for different documents and stores these different patterns when they are created (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21). Thus, the system includes a “*pattern administration unit*” that “*initially registers a document*” in that the system creates a pattern of pixels for a document and stores that pattern of pixels.

Lazzouni also discloses *"the pattern administration unit assigning a unique subset of said position-coding pattern to the pages of said registered document"* in that the system records the pattern of pixels to be used for the document, wherein **each page** of the document will have the same pattern of pixels (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21).

Lazzouni also discloses *"transferring information indicative of the unique subset of the position-coding pattern, assigned by the pattern administration unit, to a printing device adapted to print the position-coding pattern on a surface"* in that the system comprises prints patterns of pixels on paper (see Figure 4; see Column 8, Lines 22-37). Thus, the system *"transfers the position-coding pattern,"* which was *"assigned by the pattern administration unit,"* to a *"printing device"* that is *"adapted to print the position-coding pattern on a surface."* Applicant correctly states that the printing plates (see Column 8, Lines 22-33) comprise the *"printing device."*

Finally, Lazzouni discloses *"transferring document information to the printing device adapted to print the document information on the surface"* in that the system includes paper encoded with pixels, wherein the encoded paper is used by sales/mobile personnel to record "business transactions" in "sales books" and can be "made as a form" (emphasis added) (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33). That is, the system transfers *"document information"* to the *"printing device"* that is *"adapted to print the document information on the surface."* Thus, the system transfers **both** the *"document information"* **and** the *"information indicative of the unique subset of the position-coding pattern"* to the *"printing device."*

The only limitation of Claim 22 that Lazzouni fails to expressly disclose is “a *pattern administration unit that assigns a **unique** subset of said position-coding pattern to each page of said document*” (emphasis added).

As indicated in the above rejection for Claim 2, Dymetman teaches “a *pattern administration unit that assigns a unique subset of a position-coding pattern to each page of said document*” in that the document editing system uses dataglyphs to identify particular pages and to specify a function to be performed regarding that particular page (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10). Dymetman teaches that this feature is for the purposes of specifically identifying a particular page and indicating a function to be performed regarding that particular page (see Column 3, Line 25 through Column 4, Line 10).

Thus, when one of ordinary skill in the art (e.g., a computer programmer) reads the full disclosures of both Lazzouni and Dymetman, he realizes that it would be possible to design a **different** set of pixels for each page of a document in order to identify a particular page of the document and to indicate a function to be performed regarding that particular page. More particularly, a computer programmer would realize that printing plates having a **different** set of pixels could be developed for each page of a document.

Accordingly, Lazzouni, in view of Dymetman, discloses/teaches every element of Claim 2, and Dymetman provides proper motivation to combine its teaching with the disclosure of Lazzouni.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doug Hutton whose telephone number is 571-272-4137. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Art Unit: 2176

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

WDH

December 29, 2005

A handwritten signature in black ink, appearing to read 'Doug Hutton', with a stylized, sweeping flourish at the end.

**DOUG HUTTON  
PATENT EXAMINER  
TECH CENTER 2100**